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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/823,182

04/13/2004

William P. Bunton

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(2162-25601)

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EXAMINER

MAIS, MARK A

ART UNIT

PAPER NUMBER

2664

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/823,182

Applicant(s)

BUNTON ET AL.

Examiner

Mark A Mais

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2004 and 29 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 5-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 13 April 2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submissions filed on April 13, 2004 and July 29, 2004 have been entered.

### ***Priority***

2. This application is claiming the benefit of a prior filed nonprovisional application under 35 U.S.C. 120, 121, or 365(c). Coadependency between the current application and the prior application is required. The current status of all nonprovisional applications referenced should be included. Correction is required.

### ***Information Disclosure Statement***

3. The information disclosure statement (IDS) submitted on April 13, 2004 was filed together with the Application. The submission is in compliance with the provisions of 37 CFR 1.56 and 1.97. Accordingly, the examiner considered the information disclosure statement.

### ***Double Patenting***

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Moreover, the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter.

### ***Claims 5-6 and 10-12***

6. Claims 5-6 and 10-12 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,765,922 (the '922 Patent).

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7. With regard to claim 5, the '922 Patent claims a method comprising:

configuring a logical buffer to function as a FIFO buffer when a packet transmission starts [**'922 Patent, claim 1**];

if a data under-run occurs, configuring the logical buffer to extend the packet transmission for a predetermined time period [**'922 Patent, claim 1**]; and

abandoning the packet transmission after the predetermined time period expires [**'922 Patent, claim 1**].

8. With regard to claim 6, the '922 Patent claims the method of claim 5 further comprising

configuring the logical buffer to abandon the data transmission immediately when a data under-run occurs [**'922 Patent, claim 1**].

9. With regard to claim 10, the '922 Patent claims the method of claim 5 further comprising

configuring the logical buffer to store and forward packet transmissions after said abandoning the packet transmission [**'922 Patent, claim 1**].

10. With regard to claim 11, the '922 Patent claims the method of claim 10 further comprising

restarting transmission of the packet transmission after the logical buffer is configured to store and forward packet transmissions [**'922 Patent, claim 1. It is obvious that the logical buffer would not stop operating, and therefore, restart packet transmissions**].

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11. With regard to claim 12, the '922 Patent claims the method of claim 5 further comprising continuing the packet transmission, after the data under-run occurs, if valid data associated with the packet transmission is input to the logical buffer before the predetermined time period expires [**'922 Patent, claim 1. This is an obvious condition. The logical buffer continues packet transmissions until the time expires.**].

12. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter claimed in the instant application is fully disclosed in the '922 Patent and is covered by claim 1 of the '922 Patent and, thus, the '922 patent and the instant application are claiming common subject matter. Although claim 5 is broader than claim 1 of the '922 Patent, it is an obvious derivation of the '922 Patent's claim 1, and would have been obvious to one of ordinary skill in the art at the time of the invention. Thus, the claimed invention in claims 5-6 and 10-12 is obvious in light of the '922 Patent's claim 1 because claims 5-6 and 10-12 merely parse out the subject matter included in claim 1 of the '922 Patent (disclosed in the claim either explicitly or inherently, or an obvious derivation thereof).

#### ***Claims 7-9***

13. Claims 7-9 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 2 of the '922 Patent.

14. With regard to claim 7, the '922 Patent claims the method of claim 5 wherein abandoning the packet transmission comprises terminating the packet transmission with a symbol that indicates the packet is not to be processed [**'922 Patent, claim 2**].

15. With regard to claim 8, the '922 Patent claims the method of claim 5 wherein abandoning the packet transmission comprises terminating the packet transmission with a symbol that indicates the packet is not to be reported in error by intermediate routing nodes [**'922 Patent, claim 2**].

16. With regard to claim 9, the '922 Patent claims the method of claim 5 wherein abandoning the packet transmission comprises terminating the packet transmission with a symbol that indicates the packet is not to be reported in error by a destination node [**'922 Patent, claim 2**].

17. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter claimed in the instant application is fully disclosed in the '922 Patent and is covered by claim 2 of the '922 Patent and, thus, the '922 patent and the instant application are claiming common subject matter (see discussion in paragraph 12 above). Claims 7-9 are obvious derivations of the '922 Patent's claim 2, and would have been obvious to one of ordinary skill in the art at the time of the invention. Thus, the claimed invention in claims 7-9 is obvious in light of the '922 Patent's claim 2 because claims 7-9 merely parse out the subject matter included in claim 2 of the '922 Patent (disclosed in the claim either explicitly or inherently, or an obvious derivation thereof).

*Claims 13-28*

18. Claims 13-28 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 4 of U.S. Patent No. 6,765,922 ('922 Patent).

19. With regard to claim 13, the '922 Patent claims a system comprising:

a logical buffer configurable in at least two modes [**'922 Patent, claim 4, FIFO and STORE-AND-FORWARD**]; and

a timer [**'922 Patent, claim 4, necessary for the only mode of operation disclosed by the '922 patent's specification, namely, a data-under-run timer which, when asserted, causes the abandonment of the packet transmission.**],

wherein, when a packet transmission starts, the logical buffer is initially configured in a FIFO mode [**'922 Patent, claim 4**], and

wherein, if a data input rate to the logical buffer is less than a data output rate from the logical buffer, the timer starts [**'922 Patent, claim 4, necessary for the only mode of operation disclosed by the '922 patent's specification, namely, a data-under-run timer which, when asserted, causes the abandonment of the packet transmission.**], and

wherein, if the timer runs for more than a predetermined amount of time, the logical buffer is configured in a mode that buffers all data of the packet transmission prior to forwarding the packet transmission [**'922 Patent, claim 4**].



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20. The system of claim 13 wherein the logical buffer causes fill command symbols to be output while the timer runs [**'922 Patent, claim 4. It is obvious that the logical buffer must be filled during a data-under-run condition as long as DATA\_VALID is asserted**].

21. The system of claim 13 wherein the timer is reset if valid data is received by the logical buffer before the timer runs for more than the predetermined amount of time [**'922 Patent, claim 4, necessary for the only mode of operation disclosed by the '922 patent's specification, namely, a data-under-run timer which, when asserted, causes the abandonment of the packet transmission. Moreover, it is obvious that the timer must be reset if DATA\_VALID is asserted before the buffer becomes a STORE\_AND\_FORWARD buffer or else the buffer would only work once, until data-under-run the timer stopped packet transmission**].

22. The system of claim 13 wherein the logical buffer abandons transmitting the packet transmission in the FIFO mode if the timer runs for more than the predetermined amount of time [**'922 Patent, claim 4. The logical buffer is configured as a STORE\_AND\_FORWARD buffer after the timer sets off the ABANDON signal**].

23. The system of claim 13 wherein the logical buffer and the timer are implemented in a ServerNet system [**'922 Patent, claim 4. It is obvious that the logical buffer and the timer can be implemented in any system. Moreover, the '922 Patent's specification specifically discloses the particular system**].

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24. The system of claim 17 wherein the ServerNet system comprises

a requesting session block [**'922 Patent, claim 4**], a transmit buffer block [**'922 Patent, claim 4**] coupled to the requesting session block [**'922 Patent, claim 4**], and a transmit packet layer protocol block [**'922 Patent, claim 4**] coupled to the transmit buffer block [**'922 Patent, claim 4**].

25. The system of claim 18 wherein the logical buffer [**'922 Patent, claim 4**] is implemented within the transmit buffer block [**'922 Patent, claim 4**. **This is obvious because the transmit buffer block manages the buffer.**].

26. The system of claim 19 wherein the requesting session block [**'922 Patent, claim 4**] is configured to make a request to the logical buffer when the packet transmission starts [**'922 Patent, claim 4**].

27. The system of claim 20 wherein the requesting session block [**'922 Patent, claim 4**] is further configured to write a packet header to the logical buffer, generate a read request to a memory interface, and send a start signal to the transmit buffer block [**'922 Patent, claim 4**. **This is obvious because this is the only mode disclosed by the '922 Patent's specification.**].

28. The system of claim 21 wherein the transmit buffer block, upon receiving the start signal from the requesting session block, configures the logical buffer in the FIFO mode such that the logical buffer starts transferring data to the transmit packet layer protocol block for transmission

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to a destination [**'922 Patent, claim 4. This is obvious because this is the only mode disclosed by the '922 Patent's specification.**].

29. (New) The system of claim 18 wherein a valid data signal is asserted as each word of the packet transmission is transferred from the logical buffer to the transmit packet layer protocol block [**'922 Patent, claim 4. This is obvious because this is the only mode disclosed by the '922 Patent's specification.**].

30. The system of claim 23 wherein the valid data signal is de-asserted when said data input rate is lower than said data output rate [**'922 Patent, claim 4. This is obvious because there is no other method discussed for the data-under-run condition to start the timer.**].

31. The system of claim 24 wherein the timer starts when the valid data signal is de-asserted [**'922 Patent, claim 4. This is obvious because there is no other['922 Patent, claim 4. It is obvious that the logical buffer must be filled during a data-under-run condition as long as DATA\_VALID is asserted] method discussed for the data-under-run condition to start the timer.**].

32. The system of claim 25 wherein the transmit packet layer protocol block causes fill command symbols to be transmitted while the timer runs [**'922 Patent, claim 4. It is obvious that the logical buffer must be filled during a data-under-run condition as long as DATA\_VALID is asserted.**].

33. The system of claim 26 wherein, if the timer runs for more than the predetermined amount of time, the transmit packet layer protocol block abandons the packet transmission [**'922 Patent, claim 4. It is obvious that the logical buffer must be filled during a data-under-run condition as long as DATA\_VALID is asserted. This is obvious because this is the only mode disclosed by the '922 Patent's specification. ]**.

34. The system of claim 27 wherein, in response to the transmit packet layer protocol block abandoning the packet transmission. the logical buffer transitions to the mode that buffers all data of a packet transmission prior to starting packet transmission [**'922 Patent, claim 4. It is obvious that the logical buffer must be filled during a data-under-run condition as long as DATA\_VALID is asserted, else until the ABANDON signal makes the logical buffer a STORE\_AND\_FORWARD buffer.]**.

35. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter claimed in the instant application is fully disclosed in the '922 Patent and is covered by claim 4 of the '922 Patent and, thus, the '922 patent and the instant application are claiming common subject matter. Although claim 13 is somewhat different than claim 4 of the '922 Patent, it is an obvious derivation of the '922 Patent's claim 4, and would have been obvious to one of ordinary skill in the art at the time of the invention. Thus, the claimed invention in claims 13-27 is obvious in light of the '922 Patent's claim 4 because claims

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13-27 merely parse out the subject matter included in claim 4 of the '922 Patent (disclosed in the claim either explicitly or inherently, or an obvious derivation thereof) .

*Claims 29-32*

36. Claims 29-32 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,765,922 ('922 Patent).

37. With regard to claim 29, the '922 Patent claims a system comprising:

a logical buffer configurable in at least two modes [**'922 Patent, claim 1, FIFO or STORE-AND-FORWARD**];

means for configuring the logical transmission buffer in a FIFO mode when a packet starts [**'922 Patent, claim 1**];

means for tracking an amount of time from when a data-under run occurs [**'922 Patent, claim 1. This is obvious in order for the under-run timer to time out and cause the abandonment of the packet transmission.**]; and

means for configuring the logical buffer in a mode that stores and forwards the packet transmission, if the means for tracking of amount of time indicates that more than a predetermined time period has passed [**'922 Patent, claim 1**].

38. With regard to claim 30, the '922 Patent claims the system of claim 29 further comprising means for extending the packet transmission with fill command symbols while the means for tracking an amount of time operates during a data-under-run [**'922 Patent, claim 1. It is**

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**obvious that the logical buffer must be filled during a data-under-run condition as long as DATA\_VALID is asserted].**

39. With regard to claim 31, the '922 packet claims the system of claim 29 wherein the means for tracking an amount of time is reset if valid data is received by the logical buffer before the predetermined time period has passed [**'922 Patent, claim 1, necessary for the only mode of operation disclosed by the '922 patent's specification, namely, a data-under-run timer which, when asserted, causes the abandonment of the packet transmission. Moreover, it is obvious that the timer must be reset if the valid signal is asserted before the buffer becomes a STORE\_AND\_FORWARD buffer or else the buffer would only work once, until data-under-run the timer stopped packet transmission].**

40. With regard to claim 32, the '922 patent claims the system of claim 29 wherein the logical buffer abandons transmitting the packet transmission in the FIFO mode if the means for tracking an amount of time indicates that more than the predetermined amount of time has passed [**'922 Patent, claim 1. The logical buffer is configured as a STORE\_AND\_FORWARD buffer after the timer abandons the packet transmission].**

41. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter claimed in the instant application is fully disclosed in the '922 Patent and is covered by claim 1 of the '922 Patent and, thus, the '922 patent and the instant application are claiming common subject matter. Although claim 29 is somewhat different claim

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1 of the '922 Patent, it is an obvious derivation of the '922 Patent's claim 1, and would have been obvious to one of ordinary skill in the art at the time of the invention. Thus, the claimed invention in claims 29-32 are obvious in light of the '922 Patent's claim 1 because claims 29-32 merely parse out the subject matter included in claim 1 of the '922 Patent (disclosed in the claim either explicitly or inherently, or an obvious derivation thereof).

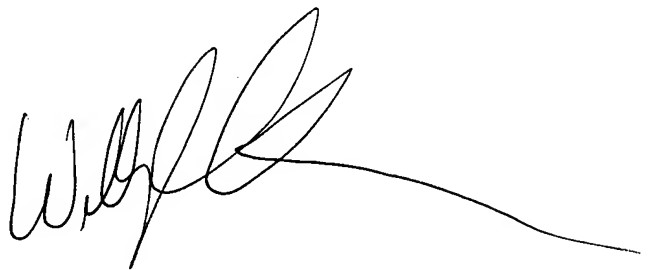
*Conclusion*

42. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A Mais whose telephone number is (571) 272-3138. The examiner can normally be reached on 8:00-4:30.

43. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (703) 305-4366. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

44. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 29, 2004

A handwritten signature in black ink, appearing to read 'W. Chin', with a long horizontal line extending to the right.